air. It was also found that a liberal allowance of light could not prevent the development of this disorder. Five children were given daily treatments with the violet ray. This treatment made no improvement on the rickets. The test diets were interesting from a point of view apart from the subject of rickets. In spite of the results of the experiments of others on rats, the authors failed to note similar results clinically. The only abnormal condition that they have noted has been a mild retardation in weight. Their experience led them to believe that under exceptional circumstances as in time of war, the danger to the infant from a deficiency of the fat-soluble factor is one not to cause great apprehension. It is not so widely distributed in nature as the water-soluble vitamin, but infants seem to be able to thrive for long periods on small quantities if the diet is otherwise complete. The great danger arises from diets composed merely of cereals and water or perhaps an insufficient amount of buttermilk or skimmed milk. There is a great danger of attributing to vitamins many little understood phenomena. They call attention to the peculiar and almost specific role played by cereal in the nutrition of infants. The gains produced could be recognized as due to an addition of any of the recognized vitamins, as diets rich in the fat-soluble, water-soluble vitamins, antiscorbutics, were improved by the addition of cereals. It was also not due to the simple increase of caloric value for the amount of food was comparatively insignificant The simplest and most direct explanation of this is that this carbohydrate brings about a more complete oxidation and therefore a better utilization of the food.

OBSTETRICS

UNDER THE CHARGE OF

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The Care of the Pregnant and Nursing Woman.—BOURET (*Arch. mens. d'obst.*, August, 1919) describes methods for caring for pregnant and parturient women in recently constructed maternities and under conditions in which much can be done to improve the health and vigor of the offspring. He believes that a modern maternity should include a portion devoted to the disorders of pregnancy, another in which labor and the puerperal period receive attention and an infirmary for abnormal cases, and in addition an out-patient or dispensary service. The portion allotted to the disorders of pregnancy may contain four rooms, in which are two beds each. The maternity portion for labor and the puerperal period should have twenty beds, of which six are in isolated rooms; twelve in two wards containing six beds each and two beds in a large room with an incubator for infants. The infirmary should have a dozen beds, six in rooms of one or two beds each for infected cases and six for aseptic cases. The dispensary should be connected with the whole of

the maternity. The infirmary department and that devoted to labor should be independent and the infirmary should again be divided into two parts: one for septic and the other for aseptic cases. These should be separated. The infirmary should be of two parts: one for septic and the other for aseptic cases, completely separated, each with its sterilizing room and operating room. There should he independent entrances to this portion of the maternity, hut it should be possible to communicate directly with the maternity. While we may condemn such a communication principle, practically it seems very necessary. The maternity proper, so-called, should contain not only beds for the lying-in patients, but rooms devoted to the care of infants and a pavilion for operations. The part reserved for operations is practically a small independent hospital, isolated in such a manner that if necessary one can readily exclude those from without. There should be a sterilizing room, with two large horizontal autoclaves, and not only should dressings be sterilized, but also bed-linen and the garments worn by patients in bed. There should also be two large reservoirs of sterilized water, apparatus for sterilizing instruments, appliances and room for ordinary labor, one for minor obstetrical operations and a large hall for clinics and operations. In each of the operating rooms there should be a copious supply of sterilized water, hot and cold. The sterilizing service of the infirmary should be completely independent of that in the maternity. It may be built on the same model, but it needs to be very much smaller. The writer adds illustrative cases showing the benefits for patients or the different functions of the maternity hospital.

Intra- and Extra-uterine Pregnancy.—Bissell (*Am. Jour. Obst.*, December, 1919) records the case of a woman, married four years, without children. She had one abortion three years previously. She was taken subsequently with the classical symptoms of ectopic gestation in the right tube. At operation there was a typical ruptured ectopic pregnancy in the right tube. The pelvic cavity was filled with blood-clots, but there was no active bleeding. The tube, ovary and clot were adherent to the uterus and pelvic floor and the ovary and the tube were removed. The left tube and the ovary were slightly adherent. The uterus was large and soft, apparently two months pregnant. The patient made an uninterrupted recovery, left the hospital and returned at the normal termination of pregnancy, when she was delivered of a female child, weighing four and three-fourths pounds. Mother and child made a good recovery. From the interval of time elapsing between the operation and childbirth the question arises as to whether this was not a case of twin pregnancy. Many operators are accustomed to dilate and curette the uterus before removing by abdominal section an ectopic pregnancy. Recent study, however, has shown that this is injurious and the majority of operators omit it.

An Early Ovum in Situ in the Act of Aborting.—Williams (*Am. Jour. Obst.*, September, 1919) describes a rare and interesting case in which an impregnated ovum was in the act of aborting. The growth of the ovum was thirty-eight days after the end of the last period. The ovum was already abnormal and shows the youngest stage of hydatid mole which the writer has yet seen. The specimen was contained in a

uterus removed by supravaginal amputation from a patient, aged thirty-nine years, married seventeen years, with three children. She had had eclampsia and phlebitis, then double femoral phlebitis, removal of the thyroid and repeated and prolonged attacks of mental depression. When first seen examination showed the uterus the size of a three months' pregnancy, but so firm and hard that a diagnosis of myoma was made. In view of the circumstances of the case it was decided after consultation to perform hysterectomy. This was done by the supravaginal method, retaining the normal tubes and ovaries. A typical corpus luteum was present in the left ovary. The patient's convalescence was uneventful, but her mental condition had not much improved. After suitable preparation serial sections were made of the specimen and thoroughly studied. No trace of the embryo could be found and the conditions were difficult to interpret. The decidua vera was thickest in the midline of the posterior wall. Section through the decidua showed the typical histological structure. The ovum was normal in location, and the only abnormality was the absence of fetal vessels and the parenchymatous stroma of the villi and the presence of large hemorrhagic areas scattered through the decidua outside the area of implantation. The ovum was evidently a very early one and abortion was in progress. One pole of the decidua capsularis had ruptured and the corresponding pole of the ovum was retarded through the defect.

The Pelvic Articulations during Pregnancy, Labor and Puerperal State.—LYNCH (*Am. Jour. Obst.*, September, 1919) reviews the literature of the subject and states that sufficient examples of pelvic separation have been reported to excite interest in its mechanism. It is admitted that both the symphysis and sacro-iliac joints are lined with synovial membrane, and it has been shown that the sacrum normally rotates within small limits on the transverse diameter. The posture of the body is all-important in bringing about these different rotations. When the patient is squatting the promontory of the sacrum is shoved forward and the coccyx backward, thus increasing the diameter of the outlet. When the body is standing weight against the promontory pushes it backward, thus increasing the length of the conjugate vera. As the pelvic joints are softened in pregnancy the movements of the sacrum are increased. This condition consists in the phenomena of labor. Nature uses this condition to assist in fitting the fetus into the pelvis as a preparation for labor. Mercurio's position, afterward described by Walcher, is based upon the rotation upon the pelvic joints. In 500 cases the pelvis had been found more mobile than that of nonpregnant in all but 2 per cent. The separation of the pubis was not more than 3 mm., and only in 16 per cent. was it more than 1 mm. There were symptoms of the condition in 15 per cent. and in 70 per cent. there was change in the gait of the patient. The writer had used the roentgen ray and had studied these joint conditions, and also had an opportunity of observing a case of rupture of the symphysis during labor, the case coming under his observation three years after the rupture occurred. Litzenberg had found in 1000 cases 96 patients who needed treatment because of some abnormal condition of the sacro-iliac joints.

Legislation Against Maternal and Infant Mortality.—FOOTE (*Am. Jour. Obst.*, November, 1919) has gone over the laws enacted by different States to protect mothers and the offspring at the time of birth. The States differ very gently. The New York code is probably the most complete regulation for obstetric practice available. Some of the States attempt to define normal and abnormal cases. In regulating the practice of midwives States differ greatly in the minuteness with which the functions of the midwife are set forth. In several States the treatment of the newborn is described in detail. The majority of States require the registration of births and many exact the registration of the midwife. There is great difference in the standards of medical education to secure a license to practice for both physician and nurses. In some States a certificate of character is required, in some reference from an obstetrical school of recognition, while others conduct examination in various ways. Examination for license to practice include a considerable number of questions in obstetrics. Examination for license is frequently written and oral according with the wishes of the examiners. The penalty for violation of the laws pertaining to parturition differs greatly in different States, and in some fine and imprisonment may be imposed at the same time. Whenever midwives are kept and intelligently supervised the question of disinfection of clothing and equipment is included. Births must be reported in the majority of States within five days after the birth of the child. In summing up the whole situation it is found there is no uniformity of laws or even of required standards. Educational centers should be established to educate women in obstetric practice, whether as midwives, nurses, hospital officials or physicians. Community centers even in rural districts, should prove valuable. Supervisors, suitably compensated, and well-paid obstetrical visiting nurses should be employed as educators of midwives and of parturient women as well.

Extraperitoneal Tumor Complicating Pregnancy.—VAN HOOSEN (*Surg., Gynec. and Obst.*, August, 1919) reports the case of a primipara, aged thirty-three years, who summoned her physician because she was suffering from severe pain. On examination a large mass was found in the posterior cul-de-sac about the size of a very large orange. It seemed to be an incarcerated tube. As the patient was not at the period of viability, she was kept in bed and given narcotics and placed in the knee-chest posture at frequent intervals. By this means she was carried along until the seventh month, when section was performed. On opening the abdomen the tumor was extraperitoneal. The abdomen was closed without performing section. An incision was then made in the posterior vaginal wall and the tumor was found feeling somewhat like a fibroid. While an effort was made to loosen the capsule the tumor was penetrated and was found smooth to the touch and filled with a bran-like tissue. This was freely evacuated, followed by severe hemorrhage, which was controlled by gauze packing. The gauze was removed on the fourth day. On the following day the patient expelled a male child through the vagina. This had been dead for a day or two because the external skin was separating. The mother did not have a high leukocyte count, nor at any time did she have a very low one. She died two weeks after the birth of the child. Ries studied this case and stated that the tumor